



**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**

☒ Declaration Submitted with Initial Filing
OR
☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number 06437 USA

First Named Inventor Bing Ji, et al.

COMPLETE IF KNOWN

Application Number 10/619,922

Filing Date 15 July 2003

Group Art Unit 1765

Examiner Name

As a below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

USE OF HYPOFLUORITES, FLUOROPEROXIDES, AND/OR FLUOROTRIOXIDES AS OXIDIZING
AGENT IN FLUOROCARBON ETCH PLASMAS

(Title of the Invention)

the specification of which

☐ is attached hereto

OR

☒ was filed on (MM/DD/YYYY) 15 July 2003 as United States Application Number or PCT International

Application Number 10/619,922 and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

[Page 1 of 2]



Please type a plus sign (+) inside this box → ☐

PTO/SB/01 (10-00)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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DECLARATION — Utility or Design Patent Application

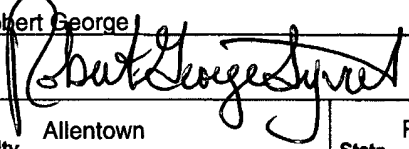

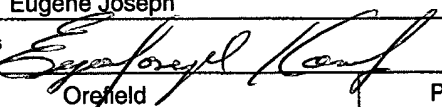
Direct all correspondence to:		<input checked="" type="checkbox"/> Customer Number or Bar Code Label	<div style="border: 1px solid black; padding: 2px; display: inline-block;">23543</div>	OR <input type="checkbox"/> Correspondence address below
Name				
Address				
Address				
City		State		ZIP
Country	Telephone		Fax	
<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</p>				
NAME OF SOLE OR FIRST INVENTOR :			<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))			Family Name or Surname	
Bing			Ji	
Inventor's Signature			Date	
			21 July, 2003	
Residence: City	State	Country	Citizenship	
Allentown	PA	USA	USA	
Mailing Address				
6736 Windermere Court				
Mailing Address				
City	State	ZIP	Country	
Allentown	PA	18104	USA	
NAME OF SECOND INVENTOR:			<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))			Family Name or Surname	
Stephen Andrew			Motika	
Inventor's Signature			Date	
			17 July 03	
Residence: City	State	Country	Citizenship	
Kutztown	PA	USA	USA	
Mailing Address				
817 Noble Street				
Mailing Address				
City	State	ZIP	Country	
Kutztown	PA	19530	USA	
<input checked="" type="checkbox"/> Additional inventors are being named on the <u>2</u> supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.				

Please type a plus sign (+) inside this box → ☐

PTO/SB/02A (11-00)
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DECLARATION	ADDITIONAL INVENTOR(S) Supplemental Sheet Page <u>1</u> of <u>2</u>
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Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Robert George		Syvret	
Inventor's Signature 		Date <u>July 22, 2003</u>	
Residence: City Allentown	State PA	Country USA	Citizenship Canada
Mailing Address 1156 Clearwood Drive			
Mailing Address			
City Allentown	State PA	ZIP 18103-5451	Country USA
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Peter R.		Badowski	
Inventor's Signature 		Date <u>7/17/03</u>	
Residence: City White Haven	State PA	Country USA	Citizenship USA
Mailing Address 100 Towanda Street			
Mailing Address			
City White Haven	State PA	ZIP 18661	Country USA
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Eugene Joseph		Karwacki, Jr.	
Inventor's Signature 		Date <u>24 July 2003</u>	
Residence: City Orefield	State PA	Country USA	Citizenship USA
Mailing Address 5620 Snowdrift Lane			
Mailing Address			
City Orefield	State PA	ZIP 18069	Country USA

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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PTO/SB/02A (11-00)
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DECLARATION	ADDITIONAL INVENTOR(S) Supplemental Sheet Page <u>2</u> of <u>2</u>
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Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Howard Paul		Withers, Jr.	
Inventor's Signature <i>Howard Paul Withers, Jr.</i>		Date <i>17 July 03</i>	
Residence: City Breinigsville	State PA	Country USA	Citizenship USA
Mailing Address 1441 Klines Mill Road			
Mailing Address			
City Breinigsville	State PA	ZIP 18031	Country USA
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Ronald Martin		Pearlstein	
Inventor's Signature <i>Ronald Martin</i>		Date <i>21 July 2003</i>	
Residence: City Macungie	State PA	Country USA	Citizenship USA
Mailing Address 118 Brookfield Drive			
Mailing Address			
City Macungie	State PA	ZIP 18062	Country USA
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	ZIP	Country

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/81 (08-03)

Approved for use through 11/30/2005. OMB 0651-0035

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**POWER OF ATTORNEY
and
CORRESPONDENCE ADDRESS
INDICATION FORM**

Application Number	10/619,922
Filing Date	15 July 2003
First Named Inventor	Bing Ji, et al.
Title	Use of Hypofluorites, Fluoroperoxides...
Art Unit	1765
Examiner Name	
Attorney Docket Number	06437 USA

I hereby appoint:

☒ Practitioners at Customer Number:

23543

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number:

OR

☐ The address associated with Customer Number:

OR

<input type="checkbox"/> Firm or Individual Name				
Address				
Address				
City		State		Zip
Country				
Telephone		Fax		

I am the:

☐ Applicant/Inventor.☒ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)**SIGNATURE of Applicant or Assignee of Record**

Name	Mark L. Rodgers		
Signature	<i>Mark L. Rodgers</i>		
Date	3 November 2003	Telephone	610-481-8817

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ *Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: Bing Ji, et al.Application No./Patent No.: 10/619,922Filed/Issue Date: 15 July 2003Entitled: Use of Hypofluorites, Fluoroperoxides, and/or Fluorotrioxides as Oxidizing Agent in...Air Products and Chemicals, Inc., a corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is _____ %

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☐ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

3 November 2003

Date

Mark L. Rodgers

Typed or printed name


SignatureAssistant General Counsel, Patents

Title

ASSIGNMENT


For value received, we, Bing Ji, Stephen Andrew Motika, Robert George Syvret, Peter R. Badowski, Eugene Joseph Karwacki, Jr., Howard Paul Withers, Jr., and Ronald Martin Pearlstein, hereby sell, assign, and transfer to **AIR PRODUCTS AND CHEMICALS, INC.**, a corporation of the State of Delaware, having an office at 7201 Hamilton Boulevard, Allentown, PA 18195-1501, the entire right, title, and interest in and to the invention relating to

**USE OF HYPOFLUORITES, FLUOROPEROXIDES, AND/OR FLUOROTRIOXIDES AS
OXIDIZING AGENT IN FLUOROCARBON ETCH PLASMAS**

described in our application for Letters Patent of the United States (identified by Docket No. 06347 USA) executed of even date herewith, in and to all Letters Patent which may be issued upon said application, in and to any divisional or reissue applications based thereon, and in and to all Letters Patent upon said invention or improvements which may be granted in foreign countries. We hereby also assign and convey to said **AIR PRODUCTS AND CHEMICALS, INC.**, all the rights accruing to us by virtue of the International Convention for the Protection of Industrial Property (Art. 4), including the right to apply for and to have patents issued in its own name.

And we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and the Officials of the Patent Offices of all other countries to issue the Letters Patent of their respective countries to said **AIR PRODUCTS AND CHEMICALS, INC.**, as assignee of the entire right, title, and interest in and to the same.

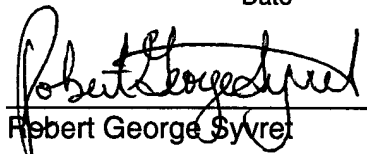
And we hereby promise and agree to execute all papers and perform all acts necessary to secure to and vest in said **AIR PRODUCTS AND CHEMICALS, INC.**, its successors and assigns, the rights conveyed as herein set forth.

 (L.S.)
Bing Ji

21 July, 2003
Date

 (L.S.)
Stephen Andrew Motika


17 July 03
Date

 (L.S.)
Robert George Syvret

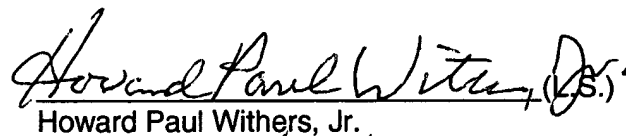
JULY 22, 2003
Date

 (L.S.)
Peter R. Badowski

7/17/03
Date

 (L.S.)
Eugene Joseph Karwacki, Jr.

21 July 2003
Date

 (L.S.)
Howard Paul Withers, Jr.

7/17/03
Date

 (L.S.)
Ronald Martin Pearlstein

21 July 2003
Date